Fin.
(appealed)

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF RICHARD HEER and FRANK G. PIERRET, et al., Appellants, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY and STANLEY H. SCHELL, Respondents, PALISADES IRRIGATION DISTRICT and PALISADES SCHOOL DISTRICT NO. 102, Intervenors.	PCHB No. 1135 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter is the appeal of "Findings of Fact and Order" signed by the Department of Ecology authorizing a permit for ground water appropriation to Stanley H. Schell. A consolidated formal hearing was held in the appeal before members of the Pollution Control Hearings Board, Chris Smith and Dave J. Mooney, on April 19, 20, 21, 1977 and

on May 16, 17 and 18, 1977 in Palisades, Washington. A transcript of proceedings held before the presiding officer on May 2 and 3, 1977 in Ephrata, Washington was read by the Board members.

Appellants David and Robert Billingsley were represented by Richard A. Lemargie; Paul Lemargie appeared for the Palisades Irrigation District; Michael R. Tabler represented the Palisades School District No. 102. All other appellants appeared pro se: Richard Heer, Frank G. Pierret, Harvey Heer, Gordon Goldy, Leon Tribble, Kenneth Radach, Clifford V. Barbre, James K. Barbre, Robert N. Kelly, Marvin L. Jordan, Bill Andruss, Harold Schempp, Ray M. Mayer, Mr. and Mrs. R. Edward Barbre, Raymond and Robert Sieverkropp, Raymond Kohne, Roger Thompson, Edward Roth, Dal Stevens, Richard A. Mayer, Charlotte Billingsley, Thomas H. Lees, Fred L. Welch, Jr., Alan R. McChesney, Herm Jordan, Sid Jordan, Dennis J. Johnson, Roger Birain, and R. L. Davis.

Assistant Attorney General Robert Mack represented respondent Departrent of Ecology; Charles D. Kimbrough appeared for respondent Stanley H. Schell; Ellen D. Peterson presided.

Having heard the testimony, having reviewed the transcript, having studied the exhibits, having read the written arguments of all parties, having considered the exceptions to the proposed order and replies thereto, having granted such exceptions in part and denied such exceptions in part, having requested and received an affidavit from appellant Billingsley, the Board makes and enters these

FINDINGS OF FACT

I

On November 5, 1974, Stanley H. Schell submitted to the Department of Ecology an application for the appropriation of public ground waters.

The application requested ground water in the amount of 1200 gallons per minute, 640 acre feet per year, for the irrigation of 160 acres within the NE 1/4 Sec. 6, T. 22 N., R. 25 EWM in Grant County, Washington. The proposed point of withdrawal is a well 16" in diameter by 1000' in depth, located at the center of the quarter section. An order authorizing the granting of a ground water permit, with the acre feet per year reduced to 186.6, was issued by the Department of Ecology on June 20, 1975. From this order Harvey L. Heer, Richard W. Heer and Frank G. Pierret appealed alleging that the permit would impair their existing rights. (PCHB Nos. 894 and 894-A).

Following a formal hearing on December 15, 1975, the Pollution Control Hearings Board issued its Findings of Fact, Conclusions and Order which vacated the permit (order) and remanded the application to the Department of Ecology for further determination. The Board found that no reliable tests or specific studies had been conducted by the Department of Ecology prior to its decision and concluded:

> . . . We construe the statutes as requiring DOE, before issuing a ground water permit which could effect a prior water right, to determine a range within which pumping lifts would be reasonable for domestic pumping developments. Having failed to do so we believe RCW 90.44.070 requires DOE to deny the application. (Conclusion of Law II, p. 8)
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> . . . .

The Board's order in PCHB Nos. 894 and 894-A is attached as Appendix 1.

II

Upon remand, the department conducted further investigations leading to the examiner's "Report, Findings of Fact and Decision",

as amended, which recommended approval of the permit with conditions. (DOE Exhibit R-2, 2A). On November 29, 1976 DOE issued a Findings of Fact and Order which accepted the examiner's report and authorized the granting of a ground water permit as conditioned. From this order appellants appealed to the Pollution Control Hearings Board on December 24, 1976.

III

The subject permit as authorized contains the following terms: "1200 gallons per minute, 187 acre feet per year, from April 1 to October 31, each year, for the irrigation of 160 acres". Location of the withdrawal is a well drilled "1320 feet south and 1320 feet west from the northeast corner of Sec. 6". In addition to general provisions, the permit was conditioned to require:

> . . . This well shall be so constructed as to effectively and permanently seal off all water bearing zones above a depth of 300 feet in order that the existing wells which depend on shallow aquifers will be protected.
>
> . . . .

The amount of water authorized under the terms of the permit would support the growing of irrigated wheat which has a water duty of approximately 14" of water per acre. The average yield which can be obtained from dryland wheat farming in the area of the subject well is 20-30 bushels an acre; with irrigation, the anticipated yield on irrigable lands is approximately 80 to 100 bushels per acre.

IV

Section 6, where the subject well is to be drilled, is located approximately 13 miles northwest of Ephrata, Washington in the area

known appropriately as Sagebrush Flats:

> Sagebrush Flats lies in a structural basin resulting from local downwarping of the earth's crust relative to tectonic uplift of the Badger Mountain Anticline on the west and south side, the uplifted west side of the Coulee Monocline on the east, and a relatively gentle structural rise to the north which has been named the McCarteney Anticline.
>
> The structurally closed basin is drained by Moses Coulee which enters the basin from the north, passes through the basin in a series of scabland channels which gather together below Rattlesnake Springs to form the deeply incised lower Moses Coulee cutting through the Badger Mountain Anticline. The Moses Coulee then extends southwesterly to the Columbia River.[1]
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> . . . .

Sagebrush Flats is a sparsely populated, semi-arid region with an annual average rainfall for the past ten years of approximately 9.15 inches. In 1976, however, annual rainfall in the Flats was only 4.36 inches. It is estimated that precipitation accounts for an average of 4,200 acre feet of water entering the Sagebrush Flats as annual recharge of the ground water. Most of this recharge enters the shallow aquifers. Within the Sagebrush Flats, interflow zones or water bearing formations between the basalt layers are known to exist at the following approximate depths from a surface elevation of 1,600:[2]

120'	-	140'	(Roza, base of flow)
200'	-	220'	(Frenchman Springs flow)
350'	-	375'	(Vantage Interflow zone)

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1. "Geologic Report on Ground Water Characteristics of Sagebrush Flats, Rattlesnake Springs and Vicinity", George E. Neff, Exhibit A-39 (Billingsley).

2. See Schell Exhibit R-5.

None of appellants' wells in the Sagebrush Flats draws from any aquifer below the Frenchman Springs Flow. Nor is the outcropping of any spring in Sagebrush Flats at an elevation below the Frenchman Springs Flow.

Within the lower Moses Coulee, average rainfall for the past ten years has been approximately 8.72" with a record low of 4.59" recorded in 1976. Water is supplied to the Coulee through precipitation, runoff of springs on the Coulee wall (particularly Rattlesnake Springs), surface waters of Douglas and McCarteney Creek, unpredictable flash floodings, and ground water. The ground water of the Coulee is drawn from an aquifer ("lake") comprised of unconsolidated sands and gravels which have been deposited in the canyon; the depth of the unconsolidated materials is 250-400' beneath the floor of the Coulee. None of appellar wells in the lower Coulee penetrates the basalt below the gravel bed.

While the Sagebrush Flats and the lower Moses Coulee have different hydrologic and geologic systems, there may be some hydraulic continuity between the deep aquifers under Sagebrush Flats and the gravel "lake" in lower Moses Coulee. (See Billingsley Exhibit A-8).

V

The level of water in a well, when no water is being withdrawn from the well, is the static water level (SWL), expressed as the vertical distance from land surface to the well water level. The water level during pumping is the pumping level (or dynamic water level). Drawdown is the difference between the static and pumping levels. The greatest amount of drop occurs in the well being pumped, but occurs at the lesser rate throughout an area of the water-bearing zone surrounding it. As

water flows from all directions toward the well (assuming aquifer material which is uniform in character and permeability in both vertical and horizontal directions) to replace the water being discharged, its velocity and hydraulic gradient increases. In this process, the water surface develops a slope toward the well (cone of depression). The size and shape of the cone varies with pumping rate, duration and amount, and aquifer characteristics. The distance from the pumped well to the horizontal limit of the cone of influence is known as the radius of influence.

In the department's Report at issue, the examiner evaluated results of pumping tests made during the 1976 irrigation season[3] and applied those findings to the proposed well. Assuming that pumping of the proposed well would be at the maximum permitted rate (1200 gpm) and quantity (187 acre feet), and that the uncased 1000 foot well would draw water from all penetrated aquifers, the examiner established a hypothetical radius of influence extending at least three but less than four miles. (Tr. 5/2, p. 239 and 244). If the effect of pumping three other undeveloped permitted wells (Schell G4-23807P) were also considered, (7200 gpm), a substantially greater drawdown and radius of influence could be expected. Both projections assumed all wells within the radius of influence to be uncased, drawing from the same

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3. Because of a lack of data on duration of pumping and rate of discharge of the Schell production well, the department assumed the drawdowns observed in nearby wells resulted from an instantaneous 2000 gpm rate for the irrigation season of 180 days, the maximum permitted under the permit. If the discharge rate and duration was actually substantially less than assumed, then the radius of influence for the production well which would result from maximum permitted usage would be considerably larger.

aquifers, and similarly constructed.

VI

Thirteen of appellants' wells are located within the three and one-half mile radius of influence of the cone of depression of the subject well (uncased):

		ELEVATION	WELL DEPTH	BOTTOM ELEVATION	MILES FROM SCHELL
o.	Schell well	1,620	1,000	600	
1.	Heer	1,645	242	1,403	3/4 mile
2.	Richard Mayer	1,630	200	1,430	1-1/3
3.	" "	1,600	200	1,400	1/4
4.	" "	1,632	200	1,432	?
5.	" "	1,615	120	1,495	1
6.	Kohne	?	52	?	2
7.	Pierret/Kohne	?	?	?	2
8.	Pierret/Kohne	?	?	?	3-1/2
9.	Billingsley	2,300	708	1,492	2-1/2
10.	"	1,100	252	848	3-1/4
11.	"	1,043	192	851	3-1/4
12.	"	1,045	192	853	3-1/4
13.	Barbre	1,700	386	1,314	3-1/3

In addition, appellants have prior rights in surface water springs within the radius of influence:

	ELEVATION	MILES FROM SCHELL WELL
Sieverkropp	1,800±	2-1/2
Billingsleys:		
Rattlesnake Springs	1,480±	1-3/4
Mineral Spring	1,460±	1-3/4
Upper Devil Spring	1,400±	2
Second Devil Spring	1,300±	2-1/4
Red Bridge Spring	1,600±	3
Domestic	1,100±	3-1/4

Also within three and one-half miles of the proposed well, seven deep wells (1000') have been authorized which include the three deep wells in Douglas County belonging to Mr. Stanley Schell under permit G4-23807P. The Schell production well, 31M, is the only authorized deep well in this area of Sagebrush Flats which has been dug to date. Its current depth is 500'.[4]

VII

Appellants are dryland wheat and small grain farmers living within the Sagebrush Flats and lower Moses Coulee. They are deeply concerned that if the pumping of the Schell well at issue dries up their springs or draws down their well water levels, they will be forced to relocate or to dig deeper at a prohibitive cost. Appellants are dependent upon their domestic wells sought to be protected and

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4. Throughout testimony the Schell wells were referenced with various identifications:

NUMBER	SECTION	DESCRIPTION	DEPTH
One	9L	"behind the barn"	498'
Two	31Q	"shallow test well"	280'
Three	7C	"well on hill"	420
Four	31R	"deep test well"/ "observation well"	674
Five	31M	"production well"	500
Six	32M		

use their springs and/or shallow wells for wildlife support, stock watering, and limited irrigation purposes.

Appellants associate recent reductions in their springs and wells with the operation of the schell production well (31M) and fear these effects will be duplicated or aggravated by pumping of the proposed well. To cite several examples related by appellants:

In 1976 for the first time within memory, the spring which fed ice age flora in a cave within the lower Coulee dried up. The cave is located approximately six miles from the production and the proposed well. Also in 1976, the historically marshy area surrounding Rattlesnake Springs located several miles west of both the production and the proposed well dried up necessitating the moving out of appellant Billingsley's cattle herd. It was appellant Billingsley's unimpeached testimony that there was some recovery of this flow when Schell's production well was turned off in 1976. In the spring of 1977 appellant Richard Mayer recorded drawdowns up to six feet in his wells sited within a mile of the production well.

No direct correlation between the pumping of the production well and the cave phenomenon was established. With regard to reductions in both the Rattlesnake Springs flow and the Mayer wells, the production well's pumping would appear to have been part of the regional pumping occurring in the immediate area and therefore was a nonquantified contributing factor in the reduction and drawdowns observed. No evidence was offered, however, that any similar effects would result from the well at issue if it were to be cased to protect the shallow aquifers.

While several wells and springs are located at an elevation below the required casing, they are at the extremity of the hypothetical radius of influence; appellants failed to establish that any drawdowns or flow reductions were experienced in these wells and springs as a result of the pumping of the production well. It should be noted that documented difficulties with declines in the water levels of wells in the lower Moses Coulee predated any pumping activity by Mr. Schell.

VIII

RCW 90.03.290 requires that:

> . . . In determining whether or not a permit shall issue upon any application, it shall be the duty of the supervisor to investigate all facts relevant and material to the application.
>
> . . . .

Upon remand, the department supplemented its earlier assessment of the effect of the proposed Schell well on the Sagebrush Flats area through:

1. Field visits by an experienced examiner over a period of one to one and one-half years totaling approximately fourteen full days of observations.

2. Geophysical logs (DOE Exhibit R-12(a)-(e)) of Schell's 500' production well and Schell's 674' observation well which tested existence and depths of water bearing zones or formations.

3. A hydrograph (DOE Exhibit R-8) reflecting measurements of static and dynamic water levels in eight wells proximate to the subject well during the period October 1975 through March 1977.

4. Further analysis of Odessa studies[5] regarding reasonable and feasible pumping lifts.

5. Well driller reports for Schell wells 31M and 31R, Mayer wells 5A and 6C, and Hanson well 2N.

6. A threshold determination that the Sagebrush Flats area and the lower Moses Coulee were separate hydrologic and geologic systems.

Despite the persistent interest expressed by area residents in DOE's conducting a thorough study of the water resources of the subject area as a preliminary to devising a water management program for future appropriation, little personal contact was made with such residents during the field visits by the department to ascertain their concerns and experiences.

IX

The examiner determined, on the bases of the department's investigations that:

1. There are public ground waters available for appropriation,

2. No direct interference will occur to appellants provided the casing and sealing requirement is met and

3. The proposed project is both feasible and a beneficial use of public ground waters.

X

Any Finding of Fact which is deemed to be a Conclusion of Law is hereby adopted as such.

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5. "Long Run Costs and Policy Implications of Adjusting to a Declining Water Supply in Eastern Washington", Water Research Center, W.S.U./U.W., October 1971.

From these Findings, the Pollution Control Hearings Board comes to these

CONCLUSIONS OF LAW

I

The provisions of RCW 90.03.250 through 90.03.340 which regulate the appropriation of surface water are extended under RCW 90.44.060 to the appropriation of public ground waters. RCW 90.03.290 establishes four determinations which are to be made by the supervisor of water resources prior to the issuance of a ground water permit:

1. There is water available for appropriation;
2. Application shall be for a beneficial use;
3. The appropriation will not impair existing rights; and
4. The permit will not be detrimental to the public welfare.

RCW 90.44.070 adds a fifth criterion which must be considered by the supervisor prior to granting a ground water permit:

> No permit shall be granted for the . . . withdrawal of public ground waters beyond the capacity of the underground bed . . . or locality to yield such water within a reasonable or feasible pumping lift in case of pumping developments, or within a reasonable or feasible reduction of pressure in the case of artesian developments. The supervisor of water resources shall have to power to determine whether the granting of any such permit will injure or damage any vested or existing right or rights under prior permits . . . .

II

In applying these specific statutory standards, the Department of Ecology is to be guided by the fundamentals of water resource policy for the state expressed in chapter 90.54 RCW:

> . . . It is the purpose of this chapter to set forth fundamentals of water resource policy for the state to insure that waters of the state are protected and fully utilized for the greatest benefit to the people . . . . (Emphasis added.)

Several factors impede optimal implementation of this policy. It is uncontroverted that there are few certainties or guarantees in the identification or projection of geologic or hydrologic conditions. It is also clear that as a public agency there are fiscal constraints on the Department of Ecology in undertaking or contracting detailed studies for every application filed. Therefore, in its management of the ground waters of this state the Department of Ecology must initially assess the potential risk to prior appropriators and/or the particular ground water body in determining the intensity of study which must be undertaken and the level of "probability" which must be achieved.

III

As the proposed well would be dug over 600' deeper than any of the appellants' operating wells in the Sagebrush Flats and as there has been no history of water table decline in this area, the Board concludes that the nature and extent of DOE investigations relative to the instant application were reasonable.

IV

The Pollution Control Hearings Board is "subject to all duties imposed upon, and [has] all power granted to, an agency by those provisions of chapter 34.04 RCW relating to contested cases." (RCW 43.21B.160). Its standard of review, therefore, in appeals of DOE orders is not as

defined and limited in RCW 34.04.130 (e.g., "clearly erroneous", "[A]rbitrary and capricious") but is rather a preponderance of the evidence presented. Thus, it is not always an adequate basis for reversal for an appellant to assert or even establish that the findings upon which the decision below was made were incomplete. Such findings can be and were both interpreted and supplemented in this matter at the de novo formal hearing before the Pollution Control Hearings Board.

V

DOE findings which do appear in the report of examination represent a prima facie case as to the determinations made therein. It is incumbent upon appellants, who have the burden of proof in this matter, to rebut such presumptions. Beyond asserting that the DOE conducted insufficient tests and that its scope of examination was too narrow, appellants presented no controverting evidence that water was not available in the aquifers which would be supplying the subject well. The test as to water availability is one made at the time of permit processing based upon an assessment of existing hydrologic and geologic data. It is not a requirement that there be a guarantee of water availability for future generations. (Even the test of impairment of prior rights discussed infra which does require an assessment of reasonably foreseeable impairment resulting from authorized activity under the instant permit protects only a limited, identifiable class.)

The additional statutory provision RCW 90.44.130 that a "safe sustaining yield from the ground water body" be maintained is a backstop provision intended to provide for reconciliation of rights of appropriators in the event of threatened overdraft. It is not an

element of water availability which is a prerequisite for initially granting a permit.

VI

The use to which the water at issue is to be applied, irrigated wheat farming, is a "beneficial use" within the meaning of that standard. RCW 90.54.020 expressly states that ". . . (1) Uses of water for . . . irrigation . . . are declared to be beneficial." While the statute does require that any ground water appropriated must continue to be applied to "economical beneficial use"[6], the "beneficial use" standard does not expressly or impliedly require the department to find that the use intended is the most beneficial use which can be contemplated.

VII

RCW 90.44.030 provides:

> The rights to appropriate the surface waters of the state and the rights acquired by the appropriation and use of surface waters shall not be affected or impaired by any of the provisions of this supplementary chapter and, to the extent that any underground water is part of or tributary to the source of any surface stream or lake, or that the withdrawal of ground water may affect the flow of any spring, water course, lake, or other body of surface water, the right of an appropriator and owner of surface water shall be superior to any subsequent right hereby authorized to be acquired in or to ground water.

This language is intended to express the relationship between two statutes enacted at different times and the coincidental use of the

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6. RCW 90.44.110, Waste of Water Prohibited.

words "affected or impaired" cannot be relied on to establish an additional test which DOE must apply prior to granting a ground water permit. The latter part of the provision relates to priorities as between appropriators.

However, a surface water right is a water right which cannot be impaired by a ground water appropriation under the criteria established in 90.03.290. The casing requirements imposed under the subject permit must be effective in also protecting springs fed by the shallow aquifers.

VIII

Hydraulic continuity of the shallow aquifers, found to exist within the Sagebrush Flats area, is addressed and retarded by the permit requirement that the well at issue be cased. However, permitting waters from the upper aquifers to cascade down existing and/or permitted wells could drain significant amounts of water from the shallow and middle aquifers to the deeper aquifers which will supply the instant well. Therefore, additional casing requirements must be imposed if the instant permit is to be affirmed. Specifically, the three Schell wells in Sections 31 and 32 of Douglas County (G4-23807P) must also be cased to a depth which will protect the shallow aquifers. Additionally, the 674' test well (31R) must be filled completely or cased to a similar depth.

With the installation of such casing, appellants' springs and wells in Sagebrush Flats will be protected from any reduction in flow to an amount below that authorized or from any measurable drawdown impact

from the pumping of the proposed well.[7]

In imposing these additional requirements, the Board does not presume to establish conditions affecting the validity of the prior Schell permit (G4-23807P). However, the Board cannot condone cascading waters from the shallow aquifers serving as a source of appropriation under the instant permit.

It is clear that if the subject well is not to be dug, none of the casing requirements on 31R or wells under G4-23807P are enforceable under this Order.

IX

The effect, if any, on appellants' wells in the lower Coulee, far removed from the radius of influence, would be an "impairment" only if the probable effect of Schell's pumping was the depletion of shared aquifers. (That is, where periodic recharge of an aquifer does not equal withdrawals from such supply, "mining" and eventual depletion of this source over time is inevitable.) Expert witnesses at hearing, including appellants' expert George Neff, testified that the Sagebrush Flats and lower Moses Coulee were separate hydrologic and geologic systems. Even if some hydraulic continuity was found to exist between the deeper aquifers in the Sagebrush Flats and the gravels of lower Moses Coulee, appellants did not establish that any such shared aquifers would be depleted as a consequence of Schell's pumping the subject well. It is significant that with the casing of the

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7. Appellants may continue to experience drawdowns caused by their own or by their neighbors' pumping.

aquifers feeding Rattlesnake Springs, no diminution of water from this source will be caused by Schell's pumping.

X

Even short of total depletion of the supply, where withdrawals are exceeding recharge, water levels decline and pumping depths and accompanying costs can increase accordingly. While no permittee is guaranteed his amount of water at a specified pumping depth, the range within which he can be expected to pump to obtain his authorized gallonage is required to be "reasonable and feasible".

Having ascertained that no domestic wells within the radius of influence or the lower Moses Coulee will be adversely impacted by the proposed well, it becomes unnecessary to require identification and review of those criteria which should establish a reasonable and feasible pumping lift for domestic as opposed to irrigation wells.[8] For those deep irrigation wells within the cone of depression, no evidence was presented that any drawdown resulting from the pumping of the proposed well would exceed the range for a reasonable and feasible pumping lift established in the examiner's report, i.e., 300' to 500' below land surface.

XI

In determining whether the permit will be "detrimental to the

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8. As this Board opined in PCHB No. 77-20, L. Savaria v. DOE and Lasater, "Where there is no detrimental effect on a prior water right, the foregoing provision [RCW 90.44.070] does not require the DOE to make a prior determination of the range of reasonable or feasible pumping lifts for an area."

public interest" or "welfare", the supervisor is to have "due regard to the highest feasible development of the use of the waters belonging to the public". (RCW 90.03.290). Contrary to appellants' contentions, this language was not intended and cannot be relied on to preclude the issuance of a permit for a declared beneficial use on the mere showing that at some time in the future there may be a federal reclamation project covering the subject area.

Nor can "public interest" be interpreted to preclude the issuance of a permit where it is possible, even likely, that a permittee intends to eventually sell the land to which the water is appurtenant. Code provisions in fact facilitate such an effort by providing for the assignment of any permit to appropriate water (RCW 90.03.310). Potential abuses, particularly a wasting of water, by any permittee are addressed in the Code through requirements that actual construction work be commenced within a reasonable time (RCW 90.03.320), requirements preliminary to issuance of a Certificate of Ground Water Right (RCW 90.44.080), prohibition against any waste of public ground waters being withdrawn (RCW 90.44.110) and penalty (misdemeanor under RCW 90.44.120) for "wilful and negligent waste of ground water".

Ultimately "public interest" must be interpreted by this Board by reconciling the dual objectives of the statutory policies: protection of the ground water supply and its full utilization as a valuable resource. After carefully evaluating the evidence presented, separating fear from fact, distinguishing remote possibility from reasonable probability, the Board concludes that the granting of the instant permit as conditioned by the permit and this order will not

be detrimental to the public interest or welfare.

If public policy is to dictate that domestic wells and dryland farmers are to be saved harmless from any negative effects of deep well pumping (even where such effects are negligible in extent or remote in time), if water resource policy is to be reevaluated with greater emphasis placed on preservation for future generations than on encouraging current maximum development, such policies must be explicitly so expressed in legislative enactments. They are not determinations which this Board can make.

XII

In bringing this appeal, the multitude of appellants wanted:

1. Assurance of no imminent impairment of their water rights and claims.

2. Assurance that DOE will monitor withdrawals in such a manner that recourse for prior appropriators in the event of an overdraft is decisive and immediate.

3. Establishment of a management program for the area so that each deep well application filed need not precipitate a repetition of these proceedings.

The Board has concluded that there will be no impairment to appellants' rights under the instant permit as conditioned. However, it strongly urges the DOE to immediately address the larger policy issues underlying this case and to recognize that the resources of the department will be less strained and more profitably applied by preparing a sound management program for the area rather than by responding defensively to a series of individual appeals of each

DOE order issued. Specifically the Pollution Control Hearings Board would encourage the department to:

1. Reevaluate its policies and priorities with respect to administrative interpretation of the dual objectives, "preservation" and "maximum development".

2. Proceed as rapidly as practicable with a thorough study of the subject area.

3. On the basis of 2) and in the context of 1), establish a sound water management program for the subject area.

4. In the interim have administrative responses refined to react effectively to overdrafts in the event appellants' apprehensions become realities.

5. Consider articulation of elements which should comprise "reasonable and feasible" pumping lift for domestic as opposed to irrigation wells.

XIII

Any Conclusion of Law which is deemed to be a Finding of Fact is hereby adopted as such.

From these Conclusions of Law, the Board enters this

ORDER

The DOE order authorizing the granting of a ground water permit to Mr. Stanley Schell is affirmed subject to the following additional conditions:

1. Prior to the digging of the subject well, the three deep wells authorized under G4-23807P are to be cased to a depth which will protect the shallow aquifers.

2. Prior to the digging of the subject well, the 674 foot observation well identified as Schell well 31R, is to be cased to a similar depth or filled completely.

3. A flow meter approved by the DOE is to be installed in the subject well.

4. If not made a part of a more comprehensive area study by the DOE, Mr. Schell is to provide the DOE with a record of his pumping (amount, duration, well levels) from the three Douglas County wells and the well at issue for at least the first three irrigation seasons when such wells are utilized; similar pumping and comparable flow information is to be provided to the DOE by appellants for wells and springs identified in Finding of Fact VI.

DATED this 30th day of August, 1977.

POLLUTION CONTROL HEARINGS BOARD

CHRIS SMITH, Member

DAVE J. MOONEY, Member